

C. Statement of Work

Performance Work Statement

Inspection, Cleaning, and Disinfection of Cooling Towers

General

Contractor shall provide all parts, materials, supervision, services, specialty services, and testing to inspect, clean and disinfect (5) 1200 ton open type cooling towers located at the CW Bill Young VAMC located at 10000 Bay Pines Blvd, Bay Pines, FL 33744. Work shall be completed so that the medical center will have no less than (4) towers available to operate the facility. All shutdown and startup of the units will be conducted by medical center personnel.

Each basin is a capacity of approximately 25,000 gallons and there are 5 total basins. Each individual cell can be isolated. Typical depth of the water in the basin is 6-8 ft. Contractor shall be responsible for removing all sludge, chemicals, or contaminants from the towers. Scaling shall be removed from the towers and must be clean upon visual inspection.

Submittals

Prior to start of the work, the contractor shall submit a site specific safety plan, required certificates and competencies of staff doing the work. The contractor shall provide evidence of compliance with Florida Department of Environmental Protection (FDEP), Southwest Florida Water Management District (SWFMD), Occupational Safety and Health Administration (OSHA), National Sanitation Foundation/American National Standards Institute (NSF/ANSI), confined space, control of hazardous energy, and fall protection requirements. Submittals shall include certification and training of staff completing the work, evidence of compliance with confined space requirements, respirator fit testing, and lock out tag out procedures

Inspection Requirements

The contractor shall provide a visual inspection of the towers including walls, roof, fans components, fill, and gear box. Contractor shall provide a written report verifying the procedure followed, disinfectant type and levels utilized, pictures of inside the tower, recommendations for improvements to the overall health of the towers, and certification that all disinfection and testing procedures complied with all state, local, and federal guidelines. The final report shall be submitted to facility no more than 14 calendar days of the completion of the work.

The towers shall be returned to a state in which the facility's chemical contractor can resume normal treatment. Any chemicals introduced for cleaning must be removed.

Coordination

The contractor shall attend a kick off meeting with the safety office, Contracting Officer's Representative, and other applicable personnel to discuss procedures and OSHA requirements 1 week prior to start of work. Valves shall only be opened or closed by VA personnel. Towers

will only be taken out of service and drained or put in service by VA personnel. The contractor shall be responsible for draining the sump. There is no direct sanitary drain for the towers and the contractor shall be responsible to pump it out to a nearby sanitary drain or truck.

Work Hours

Work hours shall be Monday through Friday 7 AM to 430 PM, unless otherwise authorized by the COR. All work shall be coordinated through COR.

Clean & Disinfecting

Work must be completed in accordance with most current trade practices, guidelines, and requirements. The following are components of the process:

1. Pre-clean inspection and disinfection of cooling tower and associated systems
 - a. Perform mechanical inspection noting any defects or hazardous conditions
 - b. Disinfect the system using chlorine, bromine, or chlorine dioxide maintaining pH or adjusting disinfectant concentration as required.
 - c. In the process of disinfection, apply a biodegreaser or biodeispersant to aid in the disinfection and removal of organic deposits, slimes, and deposits.
 - d. This above steps must be taken prior to personnel safely entering the cooling towers.
 - e. Inspection of the system shall include inspection for defects, cracks, support members, fill condition, and damage to waterproofing. The general condition of the interior of the towers shall be documented by photograph and all defects or conditions of concern shall be photographed for the owner.
2. Physical cleaning and inspection of cooling tower surfaces, components, associated systems:
 - a. VA personnel will drain the system and close off any fresh air intakes that may be negatively impacted by the overspray.
 - b. Chip and remove peeling paint and rust on gear box assembly and motor, and repaint utilizing Coronado Rust Scat Polyurethane Enamel, Sandstone, Semi-Gloss.
 - c. Clean and wash all accessible areas of the tower system including the fill, inside and outside of each individual cell, all wall surfaces, fan shroud, fan blades, and gearducer.
 - d. Remove scale and corrosive debris from the tower sump and distribution troughs
 - e. Remove and dispose of any accumulated sediments in the tower fill pack, sump, and troughs. This shall not be allowed to go into a store or sewer drain. It shall be vacuumed out and properly disposed.
 - f. Inspect condenser pumps and clean strainer for each one.
 - g. Clean and flush lines and clear nozzles of slime and debris.
 - h. Remove and clean any anti-cavitation plates and screen at the basin outlet

- i. Drain gear box oil and replace with new oil. Oil must be properly disposed of by the contractor.
 - j. All physical cleaning shall be completed utilizing a pressure washer.
3. Post-clean inspection and disinfection of cooling tower and associated systems.
 - a. Perform mechanical inspection and note any defects and conditions of concern.
 - b. Disinfect the system using chlorine, bromine, or chlorine dioxide maintaining pH or adjusting disinfectant concentration as required.
 - c. Return tower water to conditions which allow normal operation.
 - d. VA staff will return system to service.

Chemicals

Disinfectants used must be registered with the US-EPA for the application.

Safety Data Sheets (SDS) must be submitted with the proposal and maintained on site during work.

Materials/Tools

Contractor shall provide all required equipment, tools, parts, materials, personal protective equipment, and chemicals needed to complete the job. All disinfectants and chemical shall be registered with the US-EPA for the intended application.

Confined Space

The Bay Pines VA Healthcare System complies with the Occupational Safety and Health Administration (OSHA) confined space requirements as detailed in 29 CFR 1910.146. The above ground water tanks located at the C. W. Bill Young Medical Center have been evaluated and deemed to meet the definition of permit required confined spaces. All confined space entry shall comply with 29 CFR 1910.146. A site-specific Confined Space Entry plan, that specifically addresses entry conditions, air monitoring and rescue services, shall be developed and submitted to the Facility Safety and Emergency Management Service.

Confined space entry permits must be authorized by the Facility Safety and Emergency Management Service. Contractors shall coordinate with their Project Manager to request entry permits. Written request to de-classify a (PRCS) to a (CS) may be documented in writing and submitted to the Facility Safety and Emergency Management Office for consideration and approval.

Control of Hazardous Energy

A site- specific plan that describes the isolation procedures that the contractor will use, in collaboration with the Facility Engineering staff to isolate and secure plumbed supply water from entering the AST during periods of servicing and maintenance will be required. All installation, maintenance, and servicing of equipment or machinery shall comply with 29 CFR 1910.147.

Fall Protection

The fall protection (FP) threshold height requirement is 6 ft (1.8 m) for ALL WORK, unless specified differently or the OSHA 29 CFR 1926 requirements are more stringent, to include steel erection activities, systems-engineered activities (prefabricated) metal buildings, residential (wood) construction and scaffolding work.

1. The use of a Safety Monitoring System (SMS) as a fall protection method is prohibited.
2. The use of Controlled Access Zone (CAZ) as a fall protection method is prohibited.
3. A Warning Line System (WLS) may ONLY be used on floors or flat or low-sloped roofs (between 0 - 18.4 degrees or 4:12 slope) and shall be erected around all sides of the work area (See 29 CFR 1926.502(f) for construction of WLS requirements). Working within the WLS does not require FP. No worker shall be allowed in the area between the roof or floor edge and the WLS without FP. FP is required when working outside the WLS.
4. Fall protection while using a ladder will be governed by the OSHA requirements.

Other Requirements

The contractor shall provide past performance showing at least (3) successful tower cleaning contracts within the last (3) years.

Period of Performance

The contractor shall have 45 days from the Notice to Proceed to complete all work within this scope.

5. Summary of Performance:

Requirement Performance Objectives	Performance Threshold	Method of Surveillance	Performance Standard	Remedy
Successful Inspecting, Cleaning, and Disinfecting of all five (5) Cooling Towers Maintenance	in accordance with the Performance Work Statement	Inspection By The COR	98% IAW Performance Work Statement	Payment equal to correctly provided services in accordance with the PWS

Invoicing	Submission of timely, complete and accurate invoices	Inspection and certification of the invoices by the COR	100% Complete and Accurate Invoice Submittals	Payment equal to correctly provided services in accordance with the PWS
Customer Satisfaction	Timely resolution of issues that may arise during the contract	Inspection By The COR	98% Timely Resolution of issues that may arise under the contract	Payment equal to correctly provided services in accordance with the PWS